



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/627,251 | 07/24/2003 | Tetsuo Ikegame | 03436/LH | 4193 |
| 1933 | 7590 | 11/01/2007 | EXAMINER | |
| FRISHAUF, HOLTZ, GOODMAN & CHICK, PC | | | LI, SHI K | |
| 220 Fifth Avenue | | | ART UNIT | PAPER NUMBER |
| 16TH Floor | | | 2613 | |
| NEW YORK, NY 10001-7708 | | | MAIL DATE | DELIVERY MODE |
| | | | 11/01/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-----------------------|------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/627,251 | IKEGAME, TETSUO | |
| | Examiner Shi K. Li | Art Unit 2613 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 April 2007 and 24 July 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 3,5-9,11 and 12 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,4 and 10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 7/23/2007.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Based on the discussion with Douglas Holtz on 22 October 2007, the Office Action mailed 21 September 2007 is withdrawn. A new Office Action follows.

Election/Restrictions

1. Applicant's election without traverse of Species I, claims 1-2, 4 and 10, in the reply filed on 24 July 2007 is acknowledged. Claims 3, 5-9 and 11-12 are withdrawn as being directed to non-elected invention. The election requirement is made final.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 4 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Corbalis et al. (U.S. Patent 6,819,815 B1).

Regarding claims 1 and 10, Corbalis et al. discloses in FIG. 3 a switch embodiment comprising input fiber 10, output fiber 20, photo-sensor 43, light guiding means 30, 41 and 42, and control means 32. Corbalis et al. teaches in FIG. 5 four-divided photodetector light receiving surface for the photo-sensor.

Regarding claim 4, Corbalis et al. teaches in FIG. 3 splitter 30.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Corbalis et al. (U.S. Patent 6,819,815 B1) in view of Dalziel (U.S. Patent 6,844,952 B2).

Corbalis et al. has been discussed above in regard to claims 1, 4 and 10. The difference between Corbalis et al. and the claimed invention is that Corbalis et al. does not teach galvanometer mirror. However, the use of galvanometer mirror for optical switch is well known in the art. For example, Dalziel teaches in FIG. 6A an optical switch comprising galvanometer mirror 300. One of ordinary skill in the art would have combined the teaching of Dalziel with the optical switch of Corbalis et al. because galvanometer mirror is well known in the art and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use galvanometer mirror, as taught by Dalziel, in the optical switch of Corbalis et al. because galvanometer mirror is well known in the art and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Furthermore, One of ordinary skill in the art would have been motivated to combine the path alignment control apparatus of Corbalis et al. with the optical path switching device of Dalziel because the scheme of Corbalis et al. accurately alignment the light beam and minimizes power loss due to misalignment. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the path alignment control of Corbalis et al. in the optical path switching device of Dalziel because the scheme of Corbalis et al. accurately alignment the light beam and minimizes power loss due to misalignment.

Response to Arguments

6. Applicant's arguments with respect to claims 1-2, 4 and 10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shi K. Li whose telephone number is 571 272-3031. The examiner can normally be reached on Monday-Friday (7:30 a.m. - 4:30 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

skl
23 October 2007



Shi K. Li
Primary Patent Examiner